Patent Number: 4,577,635 Meredith [45] Date of Patent: Mar. 25, 1986 [54] MEDICAL INSTRUMENT [56] References Cited U.S. PATENT DOCUMENTS [75] Inventor: Hadyn G. Meredith, London, Great 4,180,080 12/1979 Murphy 128/642 Britain 4,301,806 11/1981 Helfer 128/642 4,321,931 3/1982 Hon 128/642 4,437,467 3/1984 Helfer et al. 128/642 [73] Assignee: Rocket of London Limited, Watford, Great Britain FOREIGN PATENT DOCUMENTS 2738479 3/1979 Fed. Rep. of Germany 128/642 [21] Appl. No.: 564,164 Primary Examiner-Lee S. Cohen Attorney, Agent, or Firm-Mason, Fenwick & Lawrence [22] Filed: Dec. 22, 1983 [57] **ABSTRACT** A medical instrument for monitoring fetal heart rate [30] Foreign Application Priority Data and having an electrode for insertion by rotation in the fetal head, and a torque limiting device for preventing Dec. 30, 1982 [GB] United Kingdom 8236922 over-penetration of the electrode. The torque limiting device is preferably a helical spring rotatable with the Int. Cl.⁴ A61B 5/04 electrode at low torque and arranged to disengage from U.S. Cl. 128/642 frictional driving contact at the torque limit. Field of Search 128/642, 784-786,

[11]

4 Claims, 5 Drawing Figures

United States Patent [19]

